S2 Table. Demographic parameters inferred by DaDi for simple bottleneck scenarios.

Shown are parameter estimates for six simple bottleneck scenarios fit to short intron data in DGRP inferred by DaDi [47] and the corresponding log likelihoods for each model (LL). For all inferred models, the bottleneck sizes (N_B) were fixed at values as specified in the table. All population size estimates are in terms of units $4*Ne_{ancestral}$, and all time estimates are in terms of units $2*Ne_{ancestral}$. Values of θ_{exp} were measured for each inferred demographic models and are a function of the number of base pairs (738,024) used to generate the SFS. Note that N_B=0.002 represents the population size of the bottleneck inferred by Li and Stephan (2006) [64] and N_B=0.029 is the population size of the bottleneck inferred by Thornton and Andolfatto (2006) [46]. We ultimately chose to use the short severe bottleneck model (N_B=0.002, T_B=0.0002) and shallow long bottleneck model (N_B=0.4, T_B=0.0560) because all models fit the data equally well and these two models represent the extreme ends of the range of models tested. See S3 Table for a comparison of the fit of the severe short and shallow long bottleneck models to short intron data in terms of S and π.

N_B	N_F	T_B	T_F	LL	θ_{exp}
0.002	0.601	0.0002	0.33	-285.77	10023.95
0.029	0.683	0.0021	0.18	-285.67	11337.58
0.05	0.682	0.0037	0.18	-285.67	10024.82
0.1	0.682	0.0080	0.18	-285.67	10027.46
0.2	0.682	0.0186	0.18	-285.67	10034.67
0.4	0.679	0.0560	0.16	-285.68	10069.48